

# American Journal of Public Health

Official Monthly Publication of the American Public Health Association

Vol. V

AUGUST, 1915

No. 8

## PUBLIC HEALTH AUTHORITIES AND THE CAMPAIGN AGAINST CANCER

CURTIS E. LAKEMAN,

*Executive Secretary, American Society for the Control of Cancer.*

Read before the Section of Health Officials of the American Public Health Association, Jacksonville, Fla.,  
December 4, 1914.

THE American Society for the Control of Cancer is honored by the invitation to be represented on this program, and welcomes the opportunity to ask the coöperation of American public health officials in special statistical inquiries and in educational propaganda in regard to this disease.

But as this is our first appearance in your councils, you will rightly ask for our credentials. It is reasonable that propaganda to combat particular diseases should justify themselves at the bar of the American Public Health Association, as there is naturally a limit to the number of special agencies that can or should be supported by the public and encouraged by the organized body of professional workers in this field. Your Association has a high duty to perform in applying its moral influence to prevent duplication of work and loss of motion in the public health activities of this continent. With any efforts to this end our Society is in full sympathy; as far as we are concerned we desire to sub-

scribe to the principles and submit to the tests of efficiency and real service in either independent or coöordinated endeavor.

What, then, is the plan and purpose of our organization?

A few years ago the American Association for Cancer Research, an organization of leading pathologists and laboratory students of this problem, recorded its conviction that although the ultimate cause of cancer still baffles human scrutiny, far too little use is made of the really vast amount of new and old knowledge of malignant disease that we already possess. Urging that it is not necessary, at least in this case, to know all there is to know about the nature and cause of the disease in order to limit its mortality, these men called for a country-wide effort to disseminate the present knowledge of cancer as the first step toward prevention and control. But this was only one of several converging impulses toward an organized campaign against the disease. For years the state of prevailing ignorance and

neglect of cancer in its early stages has been an old story to surgeons. By reason of that neglect an entirely unfair burden has been placed upon the profession. They have been called upon to operate as a last resort. They have been asked to work miracles, and in many cases they have met even that test. Their technique, advancing with the pathology and histology of cancer, has steadily won new triumphs. But the patients and the public have asked too much, and it is no wonder that surgery in cancer has not always been able to show a high average of success. Nevertheless, surgery in cancer is approaching the limit of efficiency, and if the operative method, as yet the first and almost the only recourse, is to save still more lives, aid must come from the patients themselves. Nor is this any the less true with other possible methods of treatment. In any case, the patients must come to treatment sooner, before the disease gets a foothold from which it cannot be dislodged. Realization of these facts has come to surgeons and physicians not as a scientific abstraction but as the result of steadily accumulating individual experiences with all their connotations of human suffering and grief. Every surgeon has records of patients that came months, even years, after the discovery of the first symptoms of cancer, nearly always too late to be saved. It is no wonder that the leading surgeons and gynecologists, here and in other countries, with a deep sense of obligation to stop this unnecessary waste of life, have attempted, individually and collectively, to teach the public that the hope of curing cancer

lies in its early recognition and treatment.

Thus the American Gynecological Society, the Clinical Congress of Surgeons and other bodies appointed special committees to consider the subject of cancer education. Eventually the participation of nearly all the special medical societies of national scope resulted, and the American Society for the Control of Cancer was organized in May, 1913, on a broadly representative basis and with the interest and support of influential lay men and women. Almost at once the new organization was officially endorsed by the American Medical Association, the American Surgical Association, the Western and Southern Surgical and Gynecological Societies and by many local medical societies. The Society is supported entirely by voluntary contributions and by the dues of its members, which include both physicians and laymen, on the plan of the National Association for the Study and Prevention of Tuberculosis.

The purpose of our Society is succinctly stated in its constitution: "To disseminate knowledge concerning the symptoms, diagnosis, treatment and prevention of cancer, to investigate the conditions under which cancer is found and to compile statistics in regard thereto."

In working toward these ends we endeavor to act as a special collecting agency and clearing house of information in the field of cancer research, statistics and education. In this respect we stand midway between investigators, research workers, statis-

ticians and all other sources of information on one side, and editors, writers, lecturers, teachers and all the channels of disseminating information on the other hand. In both these fields, in gathering facts as well as in spreading information, we earnestly ask the coöperation of the public health authorities, and to explain our request in detail, is the object of the present paper.

At this point, however, we may be met with the objection that cancer is outside the scope of public hygiene. It will be truly said that cancer is not an infectious disease—at least in any ordinary practical sense. It is not subject to quarantine and disinfection. It has not usually been considered in the class of diseases amenable to public sanitary control. Why, then, should health officials add the cancer problem to their burdens?

We would answer without hesitation that the time is coming, if it is not already here, when public health administration must take fuller account of chronic diseases. The constantly broadening conception of the function of health authorities has already brought the leading departments into this field. I am proud to have been connected, even temporarily, with the New York City Department of Health, a sanitary organization, whose pioneer achievements have given it an historic leadership in municipal health administration. Among its glorious traditions the New York Board counts the early adoption of an extraordinarily broad view of public health functions. More than twenty years ago, by establishing the first public diagnosis labor-

atory in the world, by initiating the public manufacture and distribution of diphtheria antitoxin, and by creating the scientific service which has since made such distinguished contributions to bacteriological research, the New York Board carried into practice its belief that it is among the proper functions of the public health authorities to furnish any or all facilities and procedures connected with the prevention and cure of infectious diseases. What were then revolutionary extensions of the scope of the public health department are now among its commonest duties everywhere. A similar attitude has characterized the subsequent development of public hygiene in New York, and as in many other progressive states and cities, the activities of the Department are no longer limited to the control of contagious diseases. Any governmental authority that takes a similarly broad view acts in the spirit of that early Christian philosopher, whose light still shines in the phrase: "*Nihil humanum a me alienum puto.*" With like scope of vision let every modern health department declare that nothing in the realm of preventable disease is foreign to its watchful care and interest.

A more definite and practical argument for community action against cancer and chronic diseases is found by analyzing the reduction of the death-rate. It is hardly necessary to remind you that the control of acute infectious diseases in infancy and early life has been the most important factor in the reduction of the death-rate in modern times. But along with this decrease in acute maladies, there has apparently

been, if not an increase, at least no perceptible decline in the prevalence of most chronic diseases. Studies of the evidence to this effect are numerous. One of the most recent is a life table prepared by Doctor Guilfooy, the registrar of New York City. This is based on the years 1909, 1910 and 1911, and the results are compared with a similar table for the years 1879, 1880 and 1881, prepared for the Federal Census Bureau by the late Doctor Billings. Broadly speaking, comparison shows that the expectation of life has increased for all ages below 35 and decreased at all periods above that age. In fact, all the evidence shows that the chronic degenerative diseases of middle and later life demand increasing attention from the forces which are attacking human ills on behalf of society. In so far as any or all of these diseases can be controlled by organized community efforts or by disseminating information as to their nature, prevention and cure, this is a challenge which the public health administration of the future cannot ignore.

Among the diseases of this general group, none is more important than cancer. Of intense human and social interest, clearly the first problem of medical biology, outwardly formidable and discouraging to all efforts for its conquest, cancer may still give more opening than any disease in this group to the well directed attacks of organized intelligence. This is because it offers a concrete problem and a method of attack. While we are waiting for that triumph of research which may lead the way to complete control, we can

without the slightest doubt check the cancer death-rate, if only we succeed in disseminating among the people the elementary knowledge which we already possess, and in thoroughly bringing home the lesson of early recognition and prompt surgical treatment.

In relation to the educational campaign, the classical controversy as to whether cancer is or is not increasing is of secondary and academic interest. Whether or not the recorded increase in the death-rate is real or apparent, there can be no doubt of the present importance of this disease as a cause of death in adult years, or of the fact that much of the mortality from cancer is unnecessary and preventable. From the practical point of view, this is the only aspect of the matter that interests us. In 1912 in the registration area, 46,531 deaths from cancer were recorded. It is not likely that many of these deaths were falsely attributed to cancer. The only question is whether better clinical diagnosis and certification improved by autopsy control would not have made the figure still larger. Now 46,531 deaths in the registration area means by competent estimate, 75,000 deaths in that year for the whole United States. This is the figure that gives us pause, and throws the discussion of increase or decrease into the realm of scholarly abstractions. Seventy-five thousand deaths in a single year, against perhaps 150,000 from tuberculosis and 15,000 from typhoid fever! As social workers and health officers charged with the power of government to promote social welfare, must we not ask what

shall be done to reduce that formidable total from 75,000 to 60,000, or 50,000 or whatever may be possible? If it cannot be at once reduced, must we not do our best to hold it at 75,000, while the population increases?

The social importance of cancer is readily apparent when we consider the age distribution. The census report shows that the average age of death in cancer of all forms is 59 years as against 36 years in tuberculosis. Malignant disease attacks men and women in the prime of life when family and business responsibilities render them of greatest use to society. There are comparatively few deaths from cancer at ages under 35, but after that time of life the rate increases by leaps and bounds with advancing years. The importance of cancer as a disease of later adult life is concretely stated in the calculation that 83 per cent. of all mortality from cancer in the registration area between 1906 and 1910 was at the age of 45 and over. In 1911 the specific cancer death-rate in the registration states of 1909 stood at 61 for the age-group 35 to 44, 567 for the age-group 65 to 74, and 795 for ages 75 and over. As is well known the disease is more prevalent among women. Roughly speaking, the mortality at all ages is nearly twice as great among women as among men. At ages 35 to 44 about three times as many women as men die of cancer. At ages over 40 there are more deaths from cancer than from tuberculosis or pneumonia and in this period of life one woman in eight and one man in fourteen succumbs to malignant disease.

These facts are all familiar. We bring you no new knowledge on this occasion, but desire merely to emphasize present knowledge to buttress our appeal to you as health officers to join in the efforts to check this scourge. Surely a disease which causes the death of one person in eleven over forty years of age should claim a share of your attention. From any point of view the cancer problem deserves serious consideration, but it should not be made the occasion of alarming statements, exaggerated fears, or any other manifestation of loose emotion. Rather it calls for a persistent campaign of enlightenment based on nothing but the truth. In this work we believe that state and local boards of health should take the leading part in their communities, and should disseminate among the people the accepted elementary facts about the disease. This instruction should include the following essential points:

(1) Cancer is at first a local and not a constitutional or blood disease.

(2) In the early stages it is curable if promptly recognized and properly treated.

(3) The only reliable treatment yet known is prompt and thorough surgical removal. Medicine is useless. Radium, X-rays, and other methods may have their place in expert hands and special cases, but none of them constitutes the sovereign cure for cancer or supersedes the operative method.

(4) Cancer has not been proven to be hereditary or infectious, and fear because of other cases in the family is groundless.

(5) In the early stages cancer is usually painless and it is often difficult for the patient to realize that the seemingly innocent lump or sore is in reality the same disease that is only too well known in its later and more terrible stages. Yet the disease must be recognized and treated in the early stages to insure a fair chance of cure.

These and similar facts must be repeated through the length and breadth of the land until enlightened self-interest and informed intelligence bring the majority of cancer patients to their physicians or surgeons immediately on the discovery of early symptoms. But this campaign of education must be carried on without arousing needless alarm and without creating a state of panic and carcinophobia. Local agencies can best instruct the people and first among such agencies are the state and municipal boards of health.

In conclusion, then, let me summarize what we would like to have you, as health officers, do:

First, we ask you to take an active and continuous share in the work of careful, rational, public instruction. We hope that you will publish occasional articles in your monthly and weekly bulletins, prepare and distribute well-considered special circulars and leaflets, issue press notices, add this subject to the curriculum of your lecturers, and perhaps make use of certain charts and exhibits. Especially valuable, moreover, is the systematic instruction of nurses and midwives, particularly public health nurses, who come in contact with many people in their homes and are called upon constantly for advice on health

questions. Let your nursing staff be fully instructed in the early symptoms of cancer. Remember that in the ordinary hospital training course a nurse is likely to see the disease entirely in the late and hopeless stages.

Already the state boards of Kentucky, Virginia, Louisiana, West Virginia, Michigan, Nebraska, New York, North Carolina, Kansas, and the city boards of New York, Toronto, Rochester and doubtless numerous other states and cities have undertaken some form of educational work in this field. In England, the cancer campaign is entirely in the hands of the public authorities. At the instigation of Mr. Charles P. Childe, a prominent surgeon of the south of England, the city of Portsmouth has commenced an active campaign which has recently been described by the Medical Officer of Health, Dr. A. Mearns Fraser, in a paper before the Royal Institute of Public Health, the British organization which corresponds to the American Public Health Association. Already other English health officers are taking up the work of instructing the people within their spheres of influence. The Central Midwives Board sends a circular of instructions on cancer of the uterus to every registered midwife in England and Wales.

In the second place we seek your assistance on the side of gathering information. We would consider this to be our chief function if we might be assured that the educational campaign would be taken care of by local agencies. There is and will be a continuing need of a central clearing house of information and statistics in regard

to cancer. We are interested not only in the improvement of cancer statistics generally but in the uniform recording of hospital and clinical experience with the disease and in the careful following up of operative results. We are interested, moreover, in special statistical investigations of the distribution of the disease and its greater or less prevalence in given localities. For the study of hospital records we have prepared a series of blank forms on which we are asking the leading cancer and general hospitals to furnish us with transcripts of case histories. As the tabulation and study of this material brings to light new and certain knowledge, we shall transmit it to you as the active centers for its further dissemination among the people.

In general, what is first needed is

such an improvement in cancer statistics as will give information in detail regarding the specific organs or parts of the body affected, always of course, with relation to age and sex, and in the southern states to race. In this connection a notable advance has already been made by the Director of the Census in ordering, at our suggestion, the publication of cancer mortality statistics in much fuller detail than hitherto under some thirty titles of organs and parts on a plan similar to that used by the English registration office.

The coöperation of all statistical offices in the several states and cities is particularly requested to insure success of these plans for a more thorough and detailed study and recording of the incidence, treatment and mortality of cancer.

### *Discussion.*

DR. CHARLES J. HASTINGS, *Toronto*: In the establishment of the American Society for the Control of Cancer, there was established probably one of the most important and most valuable life-saving organizations on the continent. It is difficult to understand why those of us who have been entrusted with responsibility of not only preventing diseases but of prolonging and safeguarding human life should have overlooked our duties in regard to the educative phase of this problem.

DR. C. F. BOLDUAN, *New York City*: In speaking of the way in which health authorities can aid, I thought the previous speaker overlooked one point, a point in which he has done quite a little, and that is in securing diagnostic facilities for examination of specimens. Some time ago in speaking to Mr. Lakeman about just this phase of the matter, he suggested that the New York City Health Department should, in con-

nection with its diagnostic laboratory, also offer to physicians to diagnose specimens removed at operations. The suggestion was made in a formal letter to the Department of Health and was received very favorably. The Department was about to go ahead on that proposition, realizing the very great value of the suggestion that had been made, and then learned that the New York State Institute for the Study of Malignant Diseases in Buffalo, was prepared to do just that thing, and arrangements have been made now whereby physicians in New York State can send their material for microscopic examination to the New York State Laboratory. It seems to me that this is an example which health authorities generally might copy, because, as you all know, in a great many hospitals, small tumors and other things are removed at operations and unless there is a competent and interested pathologist connected with that hospital,